PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE
This permit includes designated equipment subject to
New Source Performance Standards (NSPS Subpart Dc) and
National Emission Standards for Hazardous Air Pollutants for Source Categories
(MACT Subpart DDDDD)

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Hercules Incorporated
27123 Shady Brook Trail
Courtland, Virginia 23837-2034
Registration No.: 60188
AFS Id. No.: 51-175-00012

is authorized to modify and operate

a sizing agent manufacturing facility

located at

27123 Shady Brook Trail
Courtland, Virginia

in accordance with the Conditions of this permit.

Approved on **September DRAFT, 2007**.

Francis L. Daniel

Permit consists of 20 pages.
Permit Conditions 1 to 52.

PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses ( ) after each condition.

APPLICATION

1. This permit approval is based on the permit application dated April 26, 2005, including amendment information dated May 23, 2005, July 15, 2005, September 21, 2005, October 18, 2005, December 2, 2005, December 8, 2005, March 9, 2006, April 25, 2006, August 10, 2006, October 31, 2006, and March 9, 2007, and supplemental information dated May 25, 2005, November 15, 2005, April 12, 2006, July 6, 2006, and January 23, 2007. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

   Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

   Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

   The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, § 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

2. **Equipment List** - Equipment to be installed at this facility consists of:

   - One (1) boiler (Boiler 1, Unit Ref. No. ESB1), maximum rated heat input capacity 90 million BTU/hr (NSPS Subpart Dc and 40 CFR 63 Subpart DDDDD), using natural gas, distillate oil, residual oil, crude tall oil and tall oil pitch.

   - One (1) boiler (Boiler 2, Unit Ref. No. ESB2), maximum rated heat input capacity 90 million BTU/hr (NSPS Subpart Dc and 40 CFR 63 Subpart DDDDD), using natural gas and distillate oil.

   - One (1) storage tank (Unit Ref. No. IS-T-2), 50,000-gal capacity, for distillate oil.

   - One (1) storage tank (Unit Ref. No. IS-T-6), 50,000-gal capacity, for residual oil, crude tall oil, tall oil pitch, or a mixture of the fore-mentioned fuels.

   (9 VAC 5-80-1180 D.3 and 9 VAC 5-80-1605)

3. **Emission Controls** -
Nitrogen oxides (NOx) emissions from Boiler 1 (ESB1) shall be controlled by NOx ports (or equivalent Low NOx burners meeting the permitted NOx emission limits) and flue gas recirculation.

   Nitrogen oxides (NOx) emissions from Boiler 2 (ESB2) shall be controlled by Low NOx burners and flue gas recirculation.

   Each boiler shall be provided with adequate access for inspection.

   (9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-80-1705)

4. **Emission Controls** - Particulate matter and sulfur dioxide emissions from Boiler 1 (ESB1) during the firing of liquid fuels (i.e. distillate oils, residual oils, crude tall oil, and tall oil pitch) shall be controlled by a wet or a dry scrubber. The scrubber shall be provided with adequate access for inspection and shall be in operation when the boiler is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-410, and 9 VAC 5-60-100)

5. **Continuous Monitoring System for Boiler 1**- The scrubber installed on Boiler 1 (ESB1) for the control of particulate matter and sulfur dioxide emissions shall be equipped with a continuous monitoring system depending on the selection of a wet or dry scrubber to demonstrate continuing compliance.

   A wet scrubber shall be equipped with a PM CEMS to continuously monitor and record particulate matter emissions from the boiler.

   A dry scrubber shall be equipped with a COMS to continuously monitor and record opacity from the boiler.

   Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the boiler is operating.

   (9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, 40 CFR 60.47c, and 40 CFR 63.7500)

OPERATING/EMISSION LIMITATIONS

6. **Fuel for Boiler 1**- The approved fuels for Boiler 1 are natural gas, distillate oil, residual oil, crude tall oil and tall oil pitch. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-80-1705)

7. **Fuel for Boiler 2**- The approved fuels for ESB-2 are natural gas and distillate oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-80-1705)

8. **Fuel Throughput Limit** - Fuel throughputs to the two boilers combined shall be limited by the annual combined emission limits in Condition 16, especially for particulate matter, PM-10, and sulfur dioxide, which are capped below the PSD significant levels as defined in 9 VAC 5-80-1615. Compliance shall be determined by calculating annual emissions monthly as the sum of each consecutive 12-month period, using stack test results, PM-CEMS results, DEQ-approved emission factors, fuel usage, fuel certifications, and fuel analysis records. Calculation methods shall be submitted to and approved by the Director, Tidewater Regional Office.
(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-1705 , 9 VAC 5-50-410, and 9 VAC 5-60-100)

9. **Fuel Specifications** - The natural gas, distillate oil, residual oil, and pitch oil combusted in the boilers shall meet the specifications below:

   DISTILLATE OIL which meets the ASTM D396 specifications for numbers 1 or 2 fuel oil.

   RESIDUAL OIL which meets the ASTM D396 specifications for numbers 4, 5, or 6 fuel oil:
   Maximum sulfur content on a 30-day rolling average basis: 0.5 %

   CRUDE TALL OIL and TALL OIL PITCH:
   Tall oil pitch is the generic name for blends of products from crude tall oil fractional distillation: light ends, fatty acids, and pitch.
   Maximum sulfur content on a 30-day rolling average basis: 0.5 %

   NATURAL GAS:
   Minimum heat content: 1000 Btu/cf HHV.
   (9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-50-410)

10. **Fuel Certification**- The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;
    b. The date on which the distillate oil was received;
    c. The volume of distillate oil delivered in the shipment;
    d. The sulfur content of the distillate oil; and
    e. A statement that the distillate oil complies with the American Society for Testing and Materials specifications D396 for numbers 1 or 2 fuel oil.

    (9 VAC 5-80-1180, 9 VAC 5-50-410, and 40 CFR 60.48c (f)(1)and (2))

11. **Fuel Sampling and Analysis for Boiler 1**-
    The permittee shall sample each batch shipment of residual oil, crude tall oil, or tall oil pitch prior to transferring the fuel to tank IS-T-6 serving Boiler 1 (Unit Ref. No. ESB1) initially before startup of the boiler, and immediately prior to each shipment of fuel is added to the tank and before any fuel from the shipment is combusted. Each oil sample shall be analyzed for sulfur content according to test methods listed in Method 19 in 40 CFR 60 Appendix A. Results of the fuel analysis taken after each new shipment of fuel shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received.

The permittee shall maintain records of all fuel analyses and of all oil shipments received. These records shall be available for inspection by DEQ Tidewater Regional Office and shall be current for the most recent five years.
(9 VAC 5-80-1180, 9 VAC 5-50-410, and 40 CFR 60.44c (g) and 46c (d)(2))

12. **Alternative Fuel Sampling and Analysis for Crude Tall Oil and Tall Oil Pitch-** The permittee shall sample and analyze the crude tall oil and tall oil pitch continuously fed to tank IS-T-6 serving Boiler 1 (Unit Ref. No. ESB1) from the adjacent resin plant in accordance with the following procedure as approved by EPA Region III in Judith Katz's letter dated January 23, 2007.

    The permittee shall conduct an analysis of the crude tall oil and tall oil pitch in tank IS-T-6 for sulfur content in order to determine compliance with the sulfur content limit of NSPS Subpart Dc as outlined in a through c below:

    a. The permittee shall conduct actual sampling and analysis of the crude tall oil and tall oil pitch for sulfur content at least twice per week when combusting crude tall oil and tall oil pitch in Boiler 1, especially whenever there is a change in the process that produces the tall oil pitch, for a period of three (3) months. If the combustion of crude tall oil and tall oil pitch in Boiler 1 is discontinued before three months of data is collected, the permittee shall conduct the sampling and analysis at least twice per week when the combustion of these fuels recommences until three months of data is collected.
    b. If the analysis shows consistent compliance with the sulfur content limit of NSPS Subpart Dc, then the sampling and analysis only need to be done once per month when combusting crude tall oil and tall oil pitch in Boiler 1 for the next six (6) months.
    c. If Subpart Dc compliance is proven on a consistent basis under the given procedure, then sampling and analysis of the crude tall oil and the tall oil pitch only need to be done semi-annually when combusting crude tall oil and tall oil pitch in Boiler 1 from that point on.

    At anytime that the sulfur content limit is exceeded or whenever there is a change in the process that produces the tall oil pitch, the sampling and analysis frequency shall revert to at least twice per week, adhering to the above prescribed procedure. EPA may also review the alternative monitoring procedure and require the permittee to install and operate a continuous monitoring system pursuant to 40 CFR 60.46c to demonstrate compliance with NSPS Subpart Dc, as stated the EPA letter dated January 23, 2007.

    The oil samples shall be analyzed for sulfur content according to test methods listed in Method 19 in 40 CFR 60 Appendix A. Results of the fuel analysis from each sampling event shall be used as the daily value when calculating the 30-day rolling average until the next sampling event.

    The permittee shall maintain records of all oil analyses. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
    (9 VAC 5-80-1180, and 9 VAC 5-50-410)

13. **Operating and Training Procedures** - Emissions from boilers ESB1 and 2 shall be controlled by proper operation and maintenance of combustion and air pollution control equipment. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler and air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-1180)

14. **Short-Term Emission Limits for Boiler 1 (Unit Ref. No. ESB1) -** Short-term emissions from ESB1 shall not exceed any of the limits specified below:

	Natural Gas	**Distillate Oil**	**Residual Oil**	**Crude Tall Oil & Tall Oil Pitch**
Particulate Matter (incl. condensibles)	0.7 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr
PM-10 (incl. condensibles)	0.7 lbs/hr	1.5 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr
Sulfur Dioxide	0.05 lbs/hr	9.1 lbs/hr	9.5 lbs/hr*	9.5 lbs/hr*
Nitrogen Oxides (as NO_2)	0.049 lbs/MMBTU 4.4 lbs/hr	0.143 lbs/MMBTU 12.9 lbs/hr	0.32 lbs/MMBTU 28.8 lbs/hr	0.18 lbs/MMBTU 16.2 lbs/hr
Carbon Monoxide	400 ppmvd	400 ppmvd	400 ppmvd	400 ppmvd
Volatile Organic Compounds	0.5 lbs/hr	0.5 lbs/hr	0.8 lbs/hr	0.5 lbs/hr
Hydrogen Chloride	0.0005 lbs/MMBTU 0.045 lbs/hr	0.0005 lbs/MMBTU 0.045 lbs/hr	0.0005 lbs/MMBTU 0.045 lbs/hr	0.0005lbs/MMBTU 0.045 lbs/hr

ppmvd= parts per million by volume on a dry basis, corrected to 3% oxygen.
* 30-day rolling average

Compliance with the emission limits shall be determined from the initial compliance determinations and continuing compliance determinations in Conditions 27, 29, and 31 through 35, compliance with applicable COMS or PM CEMS requirements in Conditions 19 through 26, compliance with process requirements and operating/emission limitations in Conditions 3 through 6, and 9 through 13, and compliance with recordkeeping and reporting requirements in Conditions 41 and 42.

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-1705, 9 VAC 5-50-410, 40 CFR 60 Subpart Dc, 9 VAC 5-60-100, and 40 CFR 63 Subpart DDDDD)

15. **Short-Term Emission Limits for Boiler 2 (Unit Ref. No. ESB2) -** Short-term emissions from ESB2 shall not exceed any of the limits specified below:

	Natural Gas	**Distillate Oil**
Particulate Matter (incl. condensibles)	0.7 lbs/hr	0.03 lbs/MMBTU 2.7 lbs/hr
PM-10 (incl. condensibles)	0.7 lbs/hr	1.5 lbs/hr
Sulfur Dioxide	0.05 lbs/hr	45.4 lbs/hr
Nitrogen Oxides (as NO_2)	0.049 lbs/MMBTU 4.4 lbs/hr	0.143 lbs/MMBTU 12.9 lbs/hr
Carbon Monoxide	400 ppmvd	400 ppmvd
Volatile Organic Compounds	0.5 lbs/hr	0.5 lbs/hr
Hydrogen Chloride	0.0005 lbs/MMBTU 0.045 lbs/hr	0.0005 lbs/MMBTU 0.045 lbs/hr

ppmvd= parts per million by volume on a dry basis, corrected to 3% oxygen.

Compliance with the emission limits shall be determined from the initial compliance determination in Conditions 28 and 31, the continuing compliance determinations in Conditions 36 and 37, compliance with applicable operating/emission limitations in Conditions 7, 9, 10, and 13, and compliance with recordkeeping and reporting requirements in Conditions 41 and 43.

(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-1705, 9 VAC 5-50-410, 40 CFR 60 Subpart Dc, 9 VAC 5-60-100, and 40 CFR 63 Subpart DDDDD)

16. **Annual Emission Limits for Boilers 1 and 2, Combined-** Emissions from the operation of Boilers 1 and 2 shall not exceed the combined limits specified below:

Particulate matter (includes condensibles)	24.4 tons/yr
PM-10 (includes condensibles)	14.4 tons/yr
PM-2.5*	9.4 tons/yr
Sulfur Dioxide	39.4 tons/yr
Nitrogen Oxides (as NO_2)	182.6 tons/yr
Carbon Monoxide	95.2 tons/yr
Volatile Organic Compounds	5.7 tons/yr
Hydrogen Chloride	0.4 tons/yr

* At the time of permit issuance, PM-10 is considered surrogate for PM-2.5. Demonstration of compliance

to PM-10 emission limit would serve as surrogate approach to demonstration of compliance to PM-2.5 emission limit until such time as DEQ establishes an appropriate implementation methodology, or EPA promulgates revised implementation guidance or policy, or EPA promulgates final regulations.

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period, using stack test results, PM CEMS results, DEQ-approved emission factors, fuel usage, fuel certifications, and fuel analysis records. Calculation methods shall be submitted to and approved by the Director, Tidewater Regional Office.
(9 VAC 5-50-260, 9 VAC 5-80-1180, 9 VAC 5-80-1705 , 9 VAC 5-50-410, and 9 VAC 5-60-100)

17. **Visible Emission Limits for Boiler 1 and Boiler 2**-
Visible emissions from boiler 1 stack (Stack No. EP1) when a wet scrubber is used, and from boiler 2 stack (Ref. No. EP2) shall not exceed ten percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, and malfunction.

If a dry scrubber is used for boiler 1, visible emissions from boiler 1 stack (Stack No. EP1) shall not exceed ten percent (10%) opacity (1-hr block average) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), as required by 40 CFR 63 Subpart DDDDD. This condition applies at all times except during start-up, shutdown, and malfunction.
(9 VAC 5-80-1180, 9 VAC 5-50-260, 9 VAC 5-50-410, and 9 VAC 5-60-100)

18. **Requirements by Reference** - Except where this permit is more restrictive than the applicable requirement, the NSPS and MACT equipment as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 60 Subpart Dc, and 40 CFR 63 Subpart DDDDD unless approved otherwise in writing by the U.S. EPA Region III or DEQ.
(9 VAC 5-80-1180, 9 VAC 5-50-410, and 9 VAC 5-60-100)

COMS

19. **COMS for Boiler 1 with Dry Scrubber**– A continuous opacity monitoring system shall be installed to measure and record opacity emitted from boiler 1 stack (Stack No. EP1) if a dry scrubber is used.

The COMS shall be located, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60 Subpart Dc, 40 CFR 60.13, and 40 CFR 60 Appendix B, Performance Specification 1. The span value for the COMS shall be between 60 and 80 percent opacity. Data shall be reduced to 6-minute averages and 1-hour block averages as required by 40 CFR 63.7525 (b) and Table 8, 40 CFR 63 Subpart DDDDD.
(9 VAC 5-50-40, 9 VAC 5-50-410, and 9 VAC 5-60-100)

20. **COMS Performance Evaluations** – The continuous opacity monitoring systems shall be installed and operational prior to conducting performance tests. Performance evaluations of the COMS shall be conducted in accordance with 40 CFR 60 Appendix B, Performance Specification 1, and shall take place during the performance tests under 9 VAC 5-50-30 or within thirty (30) days thereafter. One copy of the performance evaluation report shall be submitted to the U. S. Environmental Protection Agency at the address specified in Condition 40, and to the Tidewater Regional Office, within forty-five (45) days of the evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30-day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Director, Tidewater Regional Office.
(9 VAC 5-50-40, 9 VAC 5-50-410, and 9 VAC 5-60-100)

21. **COMS Quality Control Program -** A COMS quality control program which meets the requirements of 40 CFR 60.13 and Appendix F shall be implemented.
(9 VAC 5-50-40)

22. **Semi-Annual Reports for COMS -** The permittee shall furnish written reports to the Director, Tidewater Regional Office of excess emissions from Boiler 1 (ESB1) monitored by the COMS on a six-month basis, postmarked no later than the 30th day following the end of each six-month period. By permittee's request, the postmarked dates are set for January 29 and July 30 of each year to coincide with the Title V semi-annual monitoring reports. The first semi-annual report for COMS is due on the postmarked date closest to the actual start-up date and may cover less than six months of operation. These reports shall include, but are not limited to the following information:

    a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

    c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

    d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

    A copy of the reports shall be submitted to EPA Region III at the address in Condition 40.
    (9 VAC 5-50-50)

CEMS

23. **PM CEMS for Boiler 1 with Wet Scrubber**– A continuous emission monitoring system shall be installed to measure and record particulate matter emissions as lbs/MMBTU heat input from boiler 1 stack (Stack No. EP1) if a wet scrubber is used.

    The CEMS shall be installed, calibrated, maintained, and operated in accordance with the requirements of NSPS Subpart Dc, 40 CFR 60.13, and 40 CFR 60 Appendix B, Performance Specification 11. Data shall be reduced to 24-hour block arithmetic average emission concentration using EPA Method 19 Section 12.4.1 (Reference 40 CFR 60 Appendix A), and at least two data points per hour shall be used to calculate each 1-hour arithmetic average, as required by 40 CFR 60.45c (d). At a minimum, valid hourly averages shall be obtained for 75 percent of the total operating hours per 30-day rolling average. Compliance shall be determined by comparison of the 24-hour block averages and the emission limits in Condition 14.
    (9 VAC 5-50-40, 9 VAC 5-50-410, and 40 CFR 60.47c (d))

24. **PM CEMS Performance Evaluations** – The continuous monitoring systems shall be installed and operational prior to conducting performance tests. Performance evaluations of the CEMS shall be conducted in accordance with 40 CFR 60 Appendix B, Performance Specification 11, and shall take place during the performance tests under 9 VAC 5-50-30 or within thirty (30) days thereafter. One copy of the performance evaluation report shall be submitted to the U. S. Environmental Protection Agency at the address specified in Condition 40, and to the Tidewater Regional Office, within forty-five (45) days of the evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30-day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Director, Tidewater Regional Office.
    (9 VAC 5-50-40, 9 VAC 5-50-410, and 9 VAC 5-60-100)

25. **PM CEMS Quality Control Program –** Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in 40 CFR 60 Appendix F. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.
    (9 VAC 5-50-40, and 40 CFR 60.45c(d)(12))

26. **Semi-Annual Reports for PM CEMS -** The permittee shall furnish written reports to the Director, Tidewater Regional Office of excess emissions from Boiler 1 (ESB1) monitored by the PM CEMS on a six-month basis, postmarked no later than the 30th day following the end of each six-month period. By permittee's request, the postmarked dates are set for January 29 and July 30 of each year to coincide with the Title V semi-annual monitoring reports. The first semi-annual report for PM CEMS is due on the postmarked date closest to the actual start-up date and may cover less than six months of operation. These reports shall include, but are not limited to the following information:

    a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

A copy of the reports shall be submitted to EPA Region III at the address in Condition 40.

(9 VAC 5-50-50)

INITIAL COMPLIANCE DETERMINATION

27. **Stack Test for Boiler 1-** Initial performance tests shall be conducted for particulate matter, PM-10, SO_2, NOx and CO emissions from boiler 1 (stack No. EP1) to determine compliance with the emission limits in Condition 14. The tests shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the boiler. Tests shall be conducted at the maximum normal operating load, and reported and data reduced as set forth in 9 VAC 5-50-30, 40 CFR 63.7520, test methods and procedures contained in Table 1 and Table 5 of 40 CFR 63 Subpart DDDDD, 40 CFR 60 Appendix A, and 40 CFR 51 Appendix M. Tests shall be conducted while firing a) residual oil, or b) crude tall oil or tall oil pitch. One of the fuels shall be used at start-up and tested as described above. Tests for the fuel that was not used at start-up shall be conducted within 60 days of first firing that fuel.

    The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol to the Tidewater Regional Office at least 60 days prior to testing. One copy of the test results shall be submitted within 45 days after test completion to the Tidewater Regional Office, and shall conform to the test report format enclosed with this permit.
    (9 VAC 5-50-30, 9 VAC 5-50-410, 9 VAC 5-60-100, 9 VAC 5-80-1200, and 9 VAC 5-80-1705)

28. **Stack Test for Boiler 2-** Initial performance tests shall be conducted for CO from boiler 2 (stack No. EP2) to determine compliance with the emission limits in Condition 15. The tests shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the boiler, firing distillate oil. Tests shall be conducted at the maximum normal operating load, and reported and data reduced as set forth in 9 VAC 5-50-30, 40 CFR 63.7520, test methods and procedures contained in Table 1 and Table 5 of 40 CFR 63 Subpart DDDDD, and 40 CFR 60 Appendix A. Tests shall also be conducted for natural gas firing within 60 days of achieving the maximum production rate while firing natural gas.

    The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol to the Tidewater Regional Office at least 60 days prior to testing. One copy of the test results shall be submitted within 45 days after test completion to the Tidewater Regional Office, and shall conform to the test report format enclosed with this permit.
    (9 VAC 5-50-30, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

29. **Fuel Analysis for Chloride for Boiler 1-** Initial fuel analysis shall be conducted for chloride compounds in residual oil, crude tall oil, and tall oil pitch to be burned in Boiler 1 (Unit Ref. No. ESB1) to determine compliance with the hydrogen chloride emission limit in accordance with 40 CFR 63.7521, 40 CFR 63.7530(d), and Table 6 of 40 CFR 63 Subpart DDDDD.

    The fuel analysis shall be performed, reported and demonstrate compliance within 180 days after start-up of the permitted facility. The details of the test are to be arranged with the Director, Tidewater Regional Office. The permittee shall submit a fuel analysis plan at least 60 days prior to the date of compliance demonstration. The plan shall include, at a minimum, the following:

    a. The identification of all fuel types anticipated to be burned in boiler 1;
    b. For each fuel type, whether the permittee or the fuel supplier will be conducting the fuel analysis;
    c. For each fuel type, the procedures used to obtain and prepare the composite samples; and
    d. For each fuel type, the analytical methods to be used, with the expected minimum detection levels.

    The permittee shall determine the fuel type/mixture that would result in the maximum emission rate for hydrogen chloride, and demonstrate that the calculated maximum emission rate, based on fuel pollutant content, is below emission limit.

    One copy of the test results shall be submitted within 45 days after test completion to the Tidewater Regional Office, and shall conform to the test report format enclosed with this permit.

    (9 VAC 5-50-30, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

30. **Alternative Testing-** An alternate testing matrix that generates data equivalent to the initial compliance determinations in this permit may be substituted if submitted in writing and approved by the Director, Tidewater Regional Office, and EPA Region III. All testing with an approved alternate matrix shall be completed and reported in accordance with the time frames specified within the corresponding permit conditions.

    (9 VAC 5-50-30, 9 VAC 5-50-410, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

31. **Visible Emissions Evaluation for Boiler 1 and Boiler 2-** Concurrently with the initial performance tests for boilers 1 and 2, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted by the permittee on the boiler stacks (EP1 and 2). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield six-minute averages, and for boiler 1 with dry scrubber scenario, one-hour block averages. At least one VEE shall be conducted for each of the operating scenarios for which emissions tests are required for the stack tests above. The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol at least 60 days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility.

    Should conditions prevent concurrent opacity observations, the Director, Tidewater Regional Office, shall be notified in writing, within seven days, and VEE shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions, as possible, as the initial performance tests.

One copy of the test result shall be submitted to the Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-50-410, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

CONTINUING COMPLIANCE DETERMINATION

32. **Stack Test for Boiler 1 (ESB1)** - Annually and upon request by the DEQ, the permittee shall conduct additional performance tests for CO emissions from boiler 1 (Stack No. EP1) to demonstrate compliance with the emission limit in Condition 14. Each annual performance test must be conducted between 10 and 12 months after the previous performance test. Tests shall be conducted at the maximum normal operating load, and reported and data reduced as set forth in 9 VAC 5-50-30, 40 CFR 63.7520, test methods and procedures contained Table 1 and Table 5 of 40 CFR 63 Subpart DDDDD, and 40 CFR 60 Appendix A. Tests shall be conducted while firing a) residual oil, or b) crude tall oil/tall oil pitch. Only the fuel that was fired in the previous calendar year shall be tested. If both types of fuels were fired in the previous calendar year, the worst case fuel for CO emissions based on previous test results shall be tested.

    The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol to the Tidewater Regional Office at least 60 days prior to testing. One copy of the test results shall be submitted to the Tidewater Regional Office and the U.S. EPA at the address in Condition 40 within 45 days after test completion with the Notification of Compliance Status, and shall conform to the test report format enclosed with this permit.

    (9 VAC 5-50-30, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

33. **Continuous Parametric Monitoring for PM Emissions from Boiler 1 (ESB1)- Wet Scrubber Control Scenario (MACT)-**
    If a wet scrubber is the control device, the permittee shall continuously monitor the scrubbing liquid flow rate, and the pressure differential across the scrubber. The flow sensor shall have a measurement sensitivity of 2 percent of the flow rate and calibration shall be checked at least semiannually. The pressure gauge shall have a minimum tolerance of 1.27 centimeters of water and the pressure gauge calibration shall be checked quarterly. The transducer shall have a minimum tolerance of 1 percent of the pressure range and the calibration shall be checked monthly. The permittee shall establish a site-specific minimum pressure drop, and minimum flow rate operating limits, using data from the performance tests (Table 7, 40 CFR 63 Subpart DDDDD). The data must be collected at least every 15-minutes during the entire period of the performance tests, and the average values are determined for each individual test run in the three-run performance test by computing the average of all readings taken during each test run.

    To demonstrate continuous compliance (Table 8, 40 CFR 63 Subpart DDDDD), the pressure drop, and liquid flow rate monitoring data shall be collected, reduced to 3-hour block averages, and the latter shall be maintained at or above the operating limits established during the performance tests, and not to exceed manufacturer recommended limit.

    (9 VAC 5-50-30 G, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

34. **Continuous Parametric Monitoring for SO_2 Emissions from Boiler 1 (ESB1)-**

Dry Scrubber Control Scenario- If a dry scrubber is the control device, the permittee shall continuously monitor the sorbent injection rate, and record the sorbent injection rate at least hourly. The permittee shall establish a site-specific minimum sorbent injection rate operating limit using data from the performance test. The data must be collected at least every 15-minutes during the entire period of the performance test, and the average values are determined for each individual test run in the three-run performance test by computing the average of all readings taken during each test run. To demonstrate continuous compliance, the sorbent injection rate shall be maintained at or above the operating limit established during the most recent performance test, and not to exceed manufacturer's recommended limit..

The permittee shall calibrate, maintain, and operate instrumentation in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.

Wet Scrubber Control Scenario- If a wet scrubber is the control device, the permittee shall continuously monitor the pH of the scrubber effluent, and record the pH at least hourly. The pH monitor shall be calibrated at least weekly. The permittee shall establish a site-specific minimum pH limit using data from the performance test. The data must be collected at least every 15-minutes during the entire period of the performance test, and the average values are determined for each individual test run in the three-run performance test by computing the average of all readings taken during each test run. To demonstrate continuous compliance, the pH shall be maintained at or above the pH limit established during the most recent performance test, and not to exceed manufacturer's recommended limit.

The permittee shall calibrate, maintain, and operate instrumentation in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.
(9 VAC 5-50-30 G, and 9 VAC 5-80-1200)

35. **Continuing compliance determination for hydrogen chloride emissions from boiler 1 (ESB1)-** The permittee shall maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to 40 CFR 63.7530(d)(3) is less than the applicable emission limits for hydrogen chloride. Monthly records of fuel use must be kept according to 40 CFR 63.7540(a) to demonstrate continuous compliance (Table 8, 40 CFR 63 SUBPART DDDDD).

Fuel analysis for chloride as required in Condition 29 shall be conducted for each type of fuel burned no later than five years after the previous fuel analysis for each fuel type. For a new type of fuel, the fuel analysis shall be conducted prior to burning the new type of fuel in Boiler 1. (40 CFR 63.7515(f)).
(9 VAC 5-50-50, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

36. **Stack Test for Boiler 2 (ESB2)** - Annually and upon request by the DEQ, the permittee shall conduct additional performance tests for CO emissions from boiler 2 (Stack No. EP2) to demonstrate compliance with the emission limit in Condition 15. Each annual performance test must be conducted between 10 and 12 months after the previous performance test. Tests shall be conducted at the maximum normal operating load, and reported and data reduced as set forth in 9 VAC 5-50-30, 40 CFR 63.7520, test methods and procedures contained in Table 1 and Table 5 of 40 CFR 63 Subpart DDDDD, and 40 CFR 60 Appendix A. If distillate oil was the only fuel fired in the boiler during the previous calendar year, tests shall be conducted while firing distillate oil. If natural gas was fired during the previous calendar year, tests shall be conducted while firing natural gas.

The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol to the Tidewater Regional Office at least 60 days prior to testing. One copy of the test results shall be submitted to the Tidewater Regional Office and the U.S. EPA at the address in Condition 40 within 45 days after test completion with the Notification of Compliance Status, and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

37. **Visible Emission Monitoring for Boiler 2 (ESB2)-** The permittee shall observe boiler 2 stack (EP2) at least once per week (Monday-Sunday) during daylight hours of operations for visible emissions for at least six minutes. If visible emissions are noted from the stack, operational adjustment or maintenance shall be performed on the boiler to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in the operation log. Records of observations shall include the following:
    The name of the observer,
    Date and time of the observation,
    An indication of presence or absence of visible emissions,
    The color of the emissions,
    Whether the emissions are representative of normal operation,
    If emissions are not representative of normal operation, the cause of the abnormal emissions,
    The duration of any visible emission incident, and any corrective action to eliminate visible emissions.

    If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
    (9 VAC 5-80-1180)

38. **Alternative Testing -** An alternate testing matrix that generates data equivalent to the continuing performance determinations listed in this permit may be substituted if submitted in writing and approved by the Director, Tidewater Regional Office, and EPA Region III. All testing with an approved alternate matrix shall be completed and reported in accordance with the time frames specified within the corresponding permit conditions.
    (9 VAC 5-50-30, 9 VAC 5-50-410, 9 VAC 5-60-100, and 9 VAC 5-80-1200)

39. **Testing/Monitoring Ports** – Boilers 1 and 2 (ESB1 and 2) shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations.
    (9 VAC 5-50-30 F and 9 VAC 5-80-1180)

NOTIFICATIONS

40. **Initial Notifications** - The permittee shall furnish written notification to the Director, Tidewater Regional Office:
    a. The actual date on which construction of the boilers (ESB1 and 2) commenced within 30 days after such date.
    b. The anticipated start-up date of the boilers (ESB1 and 2) postmarked not more than 60 days nor less than 30 days prior to such date.
    c. The actual start-up date of the boilers (ESB1 and 2) within 15 days after such date.
    d. The anticipated date of COMS performance evaluations postmarked not less than 60 days prior to such date.
    e. The anticipated date of PM CEMS performance evaluations postmarked not less than 60 days prior to such date.
    f. The anticipated date of performance tests of the boilers (ESB1 and 2) postmarked at least 60 days prior to such date.
    g. Notification of Compliance Status postmarked within 60 days of completion of each initial compliance determination test as required by 40 CFR 63.7545. The permittee shall include a signed statement in the Notification of Compliance Status that indicates only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, will be fired in boiler 2, as required by 40 CFR 63.7506 (a).

    Copies of the written notification referenced in items a through g above are to be sent to:

    Associate Director
    Office of Air Enforcement (3AP10)
    U.S. Environmental Protection Agency
    Region III
    1650 Arch Street
    Philadelphia, PA 19103-2029

(9 VAC 5-50-50, 9 VAC 5-80-1180, 9 VAC 5-50-410, and 9 VAC 5-60-100)

RECORDKEEPING AND REPORTING

41. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

    a. Daily, monthly, and annual throughput of natural gas, distillate oil, residual oil, crude tall oil, and tall oil pitch to boiler 1 (ESB1). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
    b. Daily, monthly, and annual throughput of natural gas and distillate oil to boiler 2 (ESB2). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Records are also to demonstrate that boiler 2 fired only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, in accordance with 40 CFR 63.7506(a).

    c. Emissions calculations sufficient to verify compliance with the annual emission limits, calculated monthly as the sum of each consecutive 12-month period. Calculation methods shall be submitted to and approved by the Director, Tidewater Regional Office.

d. All fuel supplier certifications.

e. All fuel analysis records.

f. All fuel sampling records as required by 40 CFR Part 60 Subpart Dc and 40 CFR Part 63 Subpart DDDDD as applicable to the permitted units, unless explicitly waived in writing by EPA Region III or by DEQ.

g. All COMS or PM CEMS data for boiler 1 (depending on the installation of dry scrubber or wet scrubber, respectively), calibrations, and calibration checks, percent operating time, and excess emissions.

h. All continuous parametric monitoring system data, calibrations and calibration checks, percent operating time, and excursions/deviations from normal operating ranges.

i. Periods of start-up, shutdown, and malfunction of each boiler.

j. Results of all stack tests, visible emission evaluations, visible emission observations, and performance evaluations.

k. Scheduled and unscheduled maintenance, and operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

42. **Semi-Annual Reports (NSPS/ MACT) for Boiler 1 (ESB1)**- The permittee shall submit reports to the Director, Tidewater Regional Office, within 30 days after the end of each semi-annual period. By permittee's request, the postmarked dates are set for January 29 and July 30 of each year to coincide with the Title V semi-annual monitoring reports. The first semi-annual report is due on the postmarked date closest to the actual start-up date and may cover less than six months of operation. If no shipments of distillate oil, residual oil, crude tall oil or tall oil pitch were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no such oil was received during the semi-annual period. If any of the liquid fuels was received during the semi-annual period, the reports shall include:

a. The dates included in the semi-annual period;

b. Copies of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period, or a semi-annual summary from each fuel supplier that includes the information specified in Condition 10 for each shipment of distillate oil;

c. A summary of all oil analyses indicating the sampling dates, sulfur content of the oil and method used to sample and analyze the oil;

d. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility; and

e. Information required for semi-annual compliance reports in accordance with 40 CFR 63.7550 (c).

One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency Region III at the address specified in Condition 40.
(9 VAC 5-170-160, 9 VAC 5-50-50, 9 VAC 5-50-410, and 9 VAC 5-60-100)

43. **Semi-Annual Reports (NSPS/MACT) for Boiler 2 (ESB2)-** The permittee shall submit reports to the Director, Tidewater Regional Office within 30 days after the end of each semi-annual period. By permittee's request, the postmarked dates are set for January 29 and July 30 of each year to coincide with the Title V semi-annual monitoring reports. The first semi-annual report is due on the postmarked date closest to the actual start-up date and may cover less than six months of operation. If no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no distillate oil was received during the semi-annual period. If distillate oil was received during the semi-annual period, the reports shall include:

a. The dates included in the semi-annual period;

b. Copies of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition 10 for each shipment of distillate oil;

c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility;

d. A signed statement in each semiannual compliance report that indicates only distillate oil, either alone or in combination with gaseous fuel, was fired in Boiler 2 during the reporting period, as required by 40 CFR 63.7506(a); and

e. Information required for semi-annual compliance reports in accordance with 40 CFR 63.7550 (c).

One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency Region III at the address specified in Condition 40.
(9 VAC 5-170-160, 9 VAC 5-50-50, 9 VAC 5-50-410, and 9 VAC 5-60-100)

GENERAL CONDITIONS

44. **Permit Invalidation** - This permit to construct boilers ESB 1 and 2 shall become invalid, unless an extension is granted by the DEQ, if:
    a. A program of continuous construction is not commenced before the latest of the following:
        i. 18 months from the date of this permit;
        ii. Nine months from the date that the last permit or other authorization was issued from any other governmental agency;
        iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
    b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

    (9 VAC 5-80-1210)

45. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
    a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
    b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
    c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
    d. To sample or test at reasonable times.

    For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

    (9 VAC 5-170-130 and 9 VAC 5-80-1180)

46. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

    The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
    b. Maintain an inventory of spare parts.
    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

    (9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

47. **Records of Malfunction**- The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)

48. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction,. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Director, Tidewater Regional Office in writing.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

49. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)

50. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:
    a. Knowingly makes material misstatements in the application for this permit or any amendments to it;
    b. Fails to comply with the conditions of this permit;
    c. Fails to comply with any emission standards applicable to the equipment listed in Condition 2;
    d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard; or
    e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted.

    (9 VAC 5-80-1210 F)

51. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Tidewater Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

52. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

SOURCE TESTING REPORT FORMAT

Report Cover
- Plant name and location
- Units tested at source (indicate Ref. No. used by source in permit or registration)
- Test Dates.
- Tester; name, address and report date

Certification
- Signed by team leader/certified observer (include certification date)
- Signed by responsible company official
- *Signed by reviewer

Copy of approved test protocol

Summary
- Reason for testing
- Test dates
- Identification of unit tested & the maximum rated capacity
- *For each emission unit, a table showing:
  - Operating rate
  - Test Methods
  - Pollutants tested
  - Test results for each run and the run average
  - Pollutant standard or limit
- Summarized process and control equipment data for each run and the average, as required by the test protocol
- A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
- Any other important information

Source Operation
- Description of process and control devices
- Process and control equipment flow diagram
- Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results
- Detailed test results for each run
- *Sample calculations
- *Description of collected samples, to include audits when applicable

Appendix
- *Raw production data
- *Raw field data
- *Laboratory reports
- *Chain of custody records for lab samples
- *Calibration procedures and results
- Project participants and titles
- Observers' names (industry and agency)
- Related correspondence
- Standard procedures

* Not applicable to visible emission evaluations

DRAFT PERMIT APPROVAL FORM

Department of Environmental Quality
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, Virginia 23462

Instructions:

The "Draft Permit Approval Form" provides the owner or certified company official an opportunity to accept or suggest appropriate changes to a draft permit. If a signed form is not received within one (1) week of the date of receipt of the draft permit, DEQ will assume that the draft permit is considered acceptable and will proceed with processing the permit. **Please check the applicable statement(s) below after thoroughly reviewing the draft permit. Forms may be returned by facsimile to 757-518-2009,**
Attention: Ms. Yen Bao or Ms. Jane A. Workman.

____ The owner or certified company official agrees with the conditions of the draft permit dated _____ . Please proceed to issue the permit with no change.

____ The owner or certified company official finds condition number(s) _____ of the draft permit dated _____ unacceptable.

____ The suggested changes are attached for your consideration.

____ The owner or certified company official requests further discussion with DEQ regarding the above referenced condition(s).

Signature: _____

Name: _____

Title: _____

Facility: _____

Date: _____